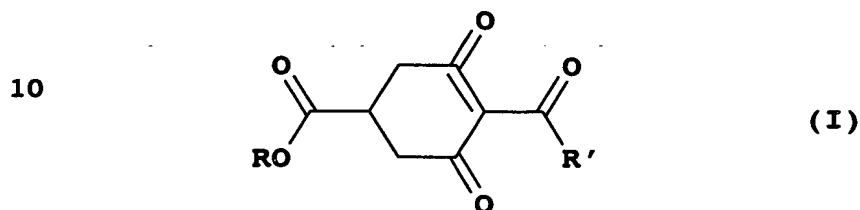


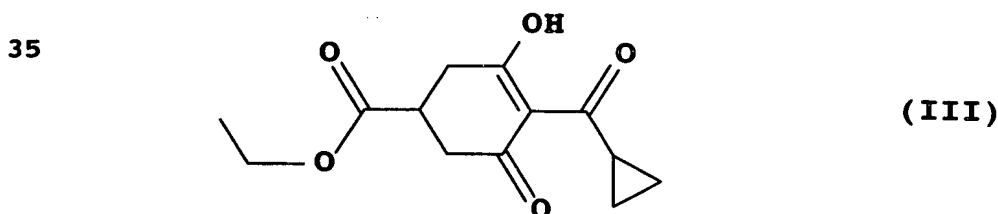
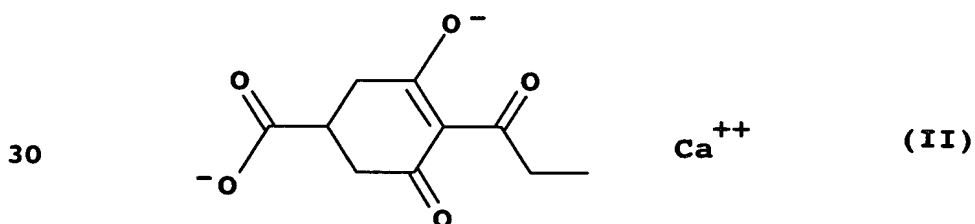
We claim:

1. A method of increasing the content of flavonoids and phenolic constituents in plants, wherein the plant [sic] are treated with growth-regulating acylcyclohexadiones [sic] of the formula I



- 15 where R is, in particular, hydrogen, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₂-C₁₀-alkylthioalkyl or phenyl (substituted or unsubstituted) and R' is hydrogen, C₁-C₆-alkyl [sic], C₃-C₆-cycloalkyl [sic], benzyl (substituted or unsubstituted), phenylethyl, phenoxyethyl, 2-thienylmethyl, alkoxyethyl or alkylthiomethyl, and suitable salts of these compounds.

2. A method as claimed in claim 1, wherein the increase are [sic] caused by treatment with acylcyclohexanediones such as prohexadione-calcium (I) and/or trinexapac-ethyl (II).



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3. A method as claimed in any of claims 1 or 2, wherein the plants are grapevines, cherries, plums, sloes, blueberries, strawberries, citrus fruit (such as oranges, grapefruit), pawpaw, red cabbage, broccoli, cauliflower, kale, carrots, parsley, celery/celeriac, onions, garlic, tea, coffee, cacao, maté, hops, soya, oilseed rape, oats, wheat, rye, *Aronia melanocarpa* and *Ginkgo biloba*.

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4. The use of plants as claimed in claim 3 or of parts of these plants or of products prepared with them (juices, infusions, extracts, fermentation products and fermentation residues) for the preparation of curative compositions,
5 health-promoting compositions or tonics for humans and animals, and of cosmetics.
5. A composition prepared by a method as claimed in any of claims 1 - 3, wherein the grapes of red grapevines are
10 harvested and processed whose anthocyanin production has been prevented fully or partially by treatment with acylcyclohexadiones [sic] such as prohexadione-calcium or trinexapac-ethyl and which are therefore distinguished by a qualitatively and quantitatively increased content of
15 flavonoids and other phenolic constituents.
6. A composition as claimed in claim 5, the composition being grapes or parts of grapes, or juices, wines or residues obtained from pressing said grapes, or extracts of the
20 abovementioned grapes, parts of grapes or grape products.

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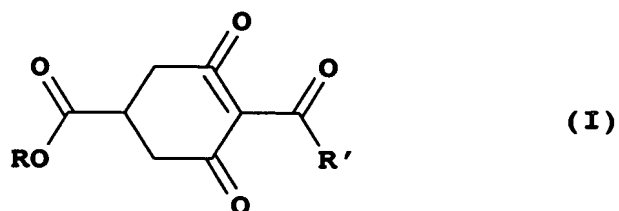
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Method of generating plants with an increased content of
flavonoids and phenolic constituents

5 Abstract

In a method for increasing the flavonoid content in plants, the
plants are treated with growth-regulating acylcyclohexadiones
[sic] of the formula I.



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